


LETTER TO EDITOR

Myocarditis should be considered in those with a troponin rise and unobstructed coronary arteries following Pfizer-BioNTech COVID-19 vaccination

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Dear Editor, I read with interest the case series by Lee *et al.*¹ in which the authors describe three cases of cardiac complications following Pfizer-BioNTech COVID-19 vaccination. In Case 3, they describe a 73-year-old woman who presented with shortness of breath and palpitations 2 h after receiving her first dose of the vaccine. Her electrocardiogram did not demonstrate any signs of ischaemia but troponin I peaked at 180 ng/l 6 h after presenting to the Emergency Department. Transthoracic echocardiogram showed a normal left ventricular ejection fraction of 60% with no regional wall motion abnormalities.

She underwent an invasive coronary angiogram that demonstrated a moderate lesion in the left anterior descending artery. This was confirmed to be non-flow limiting with a fractional flow reserve of 0.83. The remaining coronary arteries were also unobstructed. The authors concluded that this patient had a myocardial infarction with non-obstructive coronary artery disease.

Vaccine-induced myocarditis has been well described in the literature and although uncommon is an established side effect of the Pfizer-BioNTech COVID-19 vaccine.^{2–5} Therefore, in a patient with a troponin rise and unobstructed coronary arteries, a diagnosis of myocarditis should be considered as a possible diagnosis. I would suggest in such cases cardiac magnetic resonance imaging should be utilized to assess for myocardial

inflammation, oedema and fibrosis; and also confirm the underlying aetiology of the troponin rise.

Conflict of interest. None declared.

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